A Stable Decade for Construction

by
Neal Fried
Labor Economist

Email: Neal_Fried@labor.state.ak.us

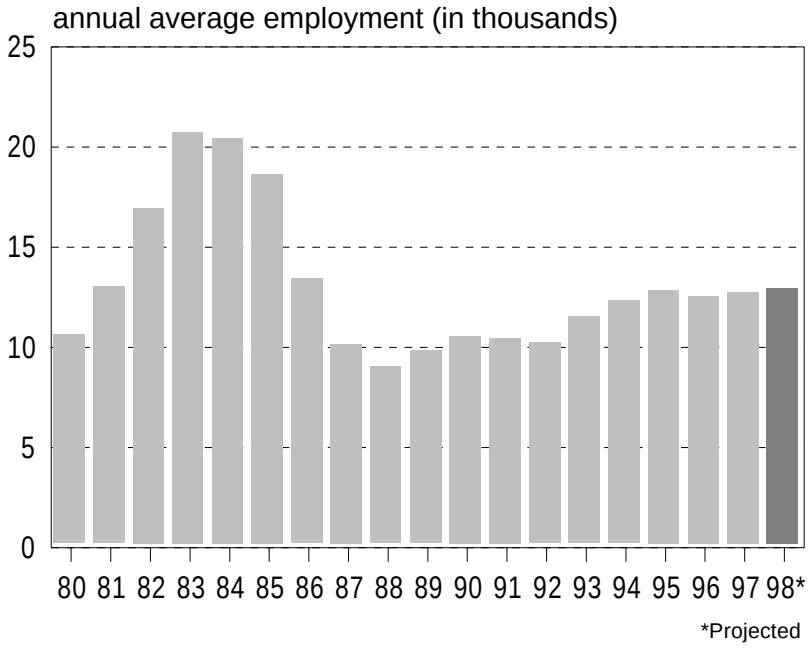
Once volatile industry settles down in the 1990s

A whiff of past construction booms is in the air. Many more road detours seem to plague communities around the state. New hotels, office buildings and other structures are going up without much attention, sometimes in the most unlikely places. New homes and subdivisions appear to be popping up everywhere. And more friends, family members and acquaintances are headed off to the North Slope to work on one of many construction projects. So is the state in the midst of a construction boom? The short answer is no. However, construction activity is on the upswing and its spunkiness represents the most steady and stable decade ever experienced by this industry.

The construction industry veers from its past in the 1990s

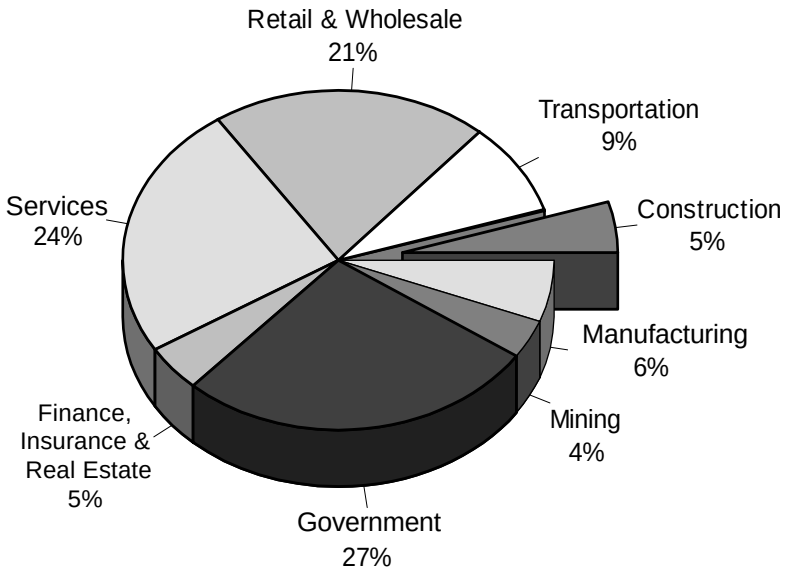
For each decade since the 1940s, Alaska's construction industry has had an amazing story to tell. Because of World War II, the industry boomed in the 1940s with the construction of the Alaska Highway and countless military installations. This boom continued into the 1950s as the Cold War unfolded and additional military installations were built or expanded. Then, in the 1960s, infrastructure catch-up took place to accommodate the state's earlier population growth. During the 1970s, the industry was crowned with its largest project ever–the construction of the Trans-Alaska Pipeline. In the early 1980s, as oil revenues began to flow through this pipeline and into the state's treasury, a construction boom in both the public and private sectors followed. During the second half of that same decade, a construction and economic bust ensued that would ultimately change the face of the industry and its role in the state's economy. In the 1990s, to the delight of many and disappointment of a few who yearned for the former boom cycles, the industry began to recover and settle into its most stable period of growth. (See Exhibit 1.)

Construction in the 1990s 1
Stability after boom/bust swings

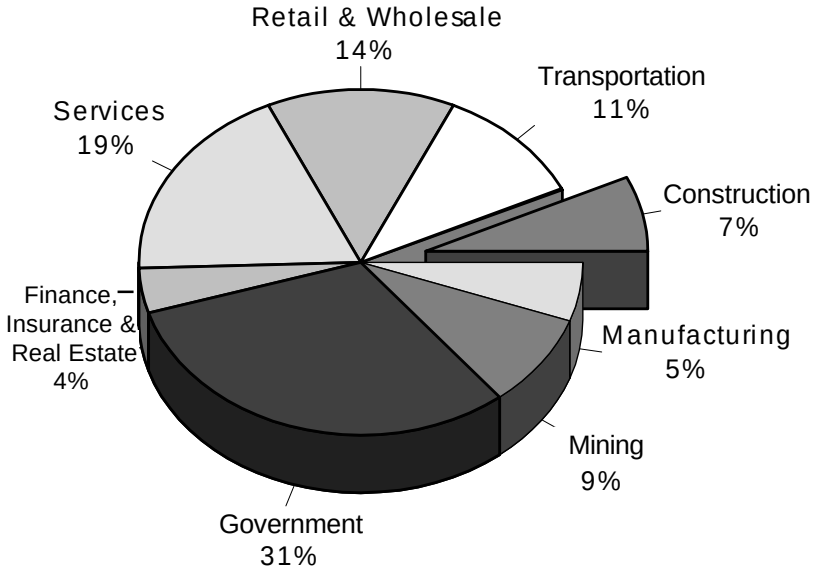


Source: Alaska Department of Labor, Research and Analysis Section

2 Wage & Salary Employment
Construction's share is 5%



3 Construction Payroll in 1990s
High wages bring share to 7%



Source: Alaska Department of Labor, Research and Analysis Section

Construction's role in the economy has changed

Prior to the 1990s, the construction industry and its projects often led, and to some extent dictated, the direction and strength of the Alaska economy. The health of the construction industry often went hand-in-hand with population and economic growth. For example, in the 1940s the primary reason for the strong growth in Alaska's economy was construction of military infrastructure. The same was true for the 1950s. In the 1970s and early 1980s when Alaska experienced its largest population surge, the construction boom was largely responsible. Put another way, the destiny of the state's economic health was often determined by the level of construction activity. During the last decade, this role has largely disappeared. In previous decades, construction industry employment was responsible for eight to 10 percent of all wage and salary employment in the state and in certain periods much more. (In 1975-76, more than a third of the wages paid out in Alaska came from the construction industry.) In the 1990s, construction's share of wage and salary employment fell to approximately five percent. (See Exhibit 2.)

Unlike any previous decade, construction employment in the 1990s has not been a large factor in overall employment growth. In the 1990s, total employment grew by over 30,000 jobs and construction was responsible for approximately seven percent of this growth, compared to nearly 50 percent for services and almost 30 percent for retail. Instead of the economy reacting to the construction industry, the industry has accommodated the rest of the economy.

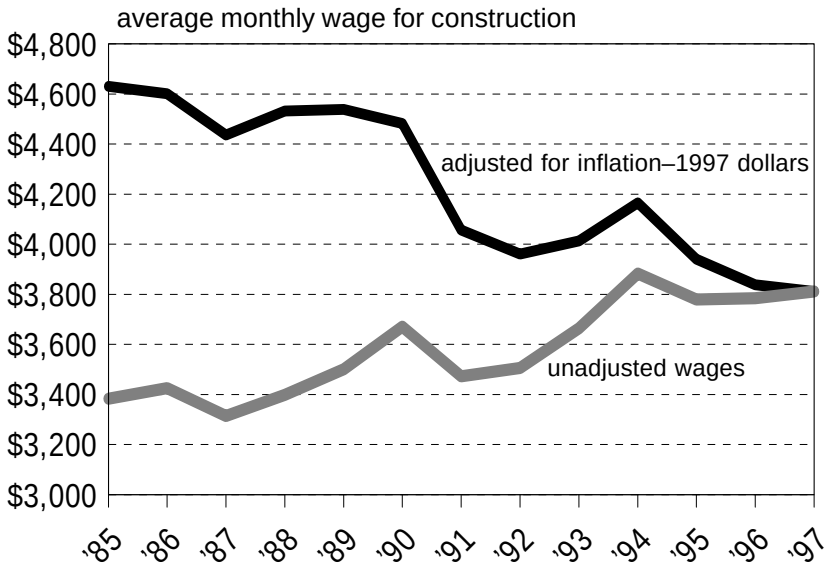
In the 1990s, no one or two construction projects have dominated the industry or the economy. Over the past decade, both private and public sector infrastructure work has been an important source of activity. Examples include the recent $200 million expansion of the Red Dog mine and the construction of the $250 million Healy Clean

Coal plant, completed in 1997. Along with infrastructure-type construction there also have been healthy levels of both commercial and residential activity. The construction of more than half a dozen new hotels over the past three years and the significant investments of large national retailers in the early 1990s are good examples of the commercial activity in the 1990s. On the residential side, most communities have experienced a steady recovery from the second half of the 1980s. For example, in the state's largest housing market, the Anchorage/Mat-Su region, 1998 will go down as the busiest residential construction season since 1984.

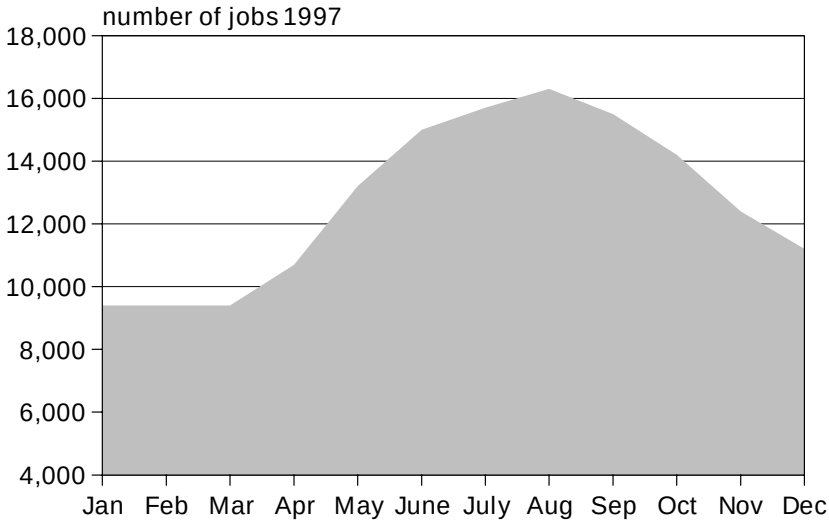
The construction industry is one of the few industries in the state that employs fewer people in absolute terms today than it did in previous decades. During the first six years of the 1980s, at a time when Alaska's population was nearly 100,000 smaller than it is today and the workforce was 20 percent (42,600 jobs) smaller, the construction workforce was 29% larger. For two years in the 1980s, construction's employment numbers topped the 20,000 mark. During nearly half of the 1970s, the construction workforce was larger than it is today, although the population in the state at that time was approximately 200,000 smaller than the present population, and the wage and salary workforce was more than 100,000 smaller. It was in 1976 that the state's construction workforce reached its zenith at 30,000, twice its present size. At that time, the construction industry was the state's second largest employer and paid out the largest payroll.

In some ways, this decline in the size of Alaska's construction industry in both absolute terms and relative to the rest of the economy parallels the nationwide story of the decline of the manufacturing industry. Both are generally high-paying industries. Both industries provide good occupational opportunities to workers not choosing the four year college route. The smaller role both of these industries play in the respective state and national economies partly

Wages Adjusted for Inflation 4
Ground lost in 1990s

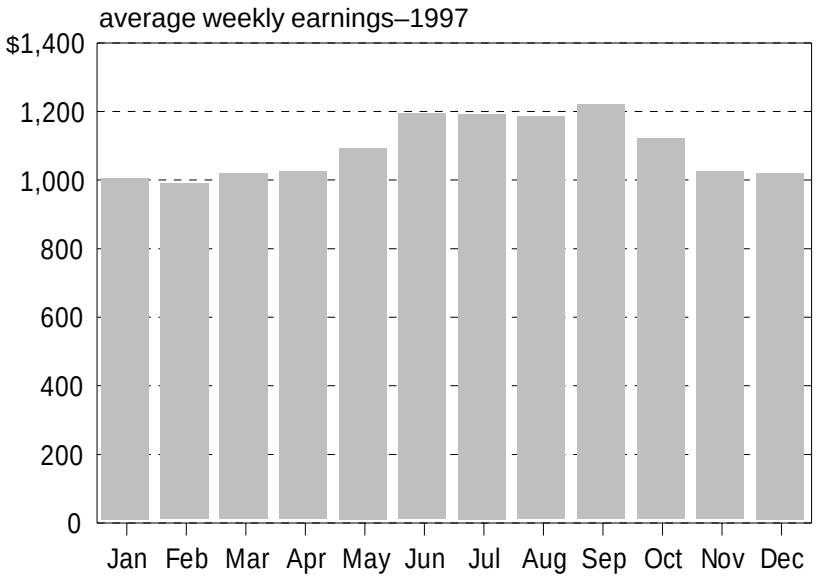


The Seasonality of Construction 5
Jobs nearly double in peak months

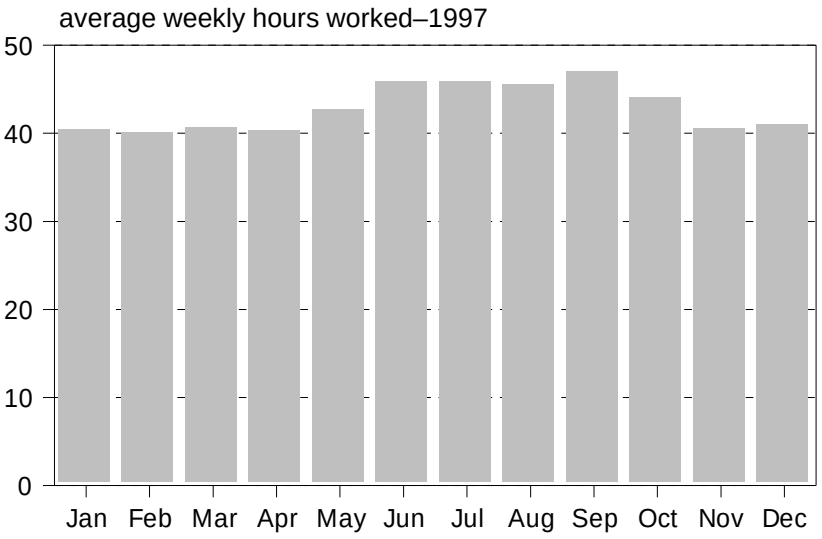


Source: Alaska Department of Labor, Research and Analysis Section

6 Construction Earnings
Peak in summer months



7 And So Do Hours Worked



Source: Alaska Department of Labor, Research and Analysis Section

explains weak wage growth. Unlike the nation's manufacturing, construction in the state does not appear to be an industry in permanent decline. Instead, it is an industry whose role has changed relative to the rest of the state's economy. Some might even call it part of the "maturing" of the Alaska economy. As a young frontier state, with tremendous infrastructure needs and a small workforce, it was natural that construction played a much more important role in Alaska's economy in past years relative to most of the rest of the nation. Unlike employment in the nation's manufacturing industry, employment in Alaska's construction industry has enjoyed steady growth since 1989. It is also conceivable that, at some time in the future, construction employment could surpass its historical peaks of the 1970s.

Second highest paying industry in the state

Twenty years ago construction's average monthly wage was tops in the state. In 1979, it fell to second place behind the oil industry but it still ranks as one of the best paying industries. Mining is the only other industry that enjoys higher wages but it is a fraction of the size of the construction industry. Construction's average monthly wage in 1997 was $3,811. That is 39 percent above the overall statewide monthly average wage of $2,733. Construction enjoys an above average wage because of higher-than-average hourly wages paid to the various trades. The prevalence of overtime work, paid at one and a half times the base wage, is another important factor. These higher wages mean that the impact of this industry's payroll on the economy is greater than its employment. Construction may employ only five percent of the wage and salary workforce, but it is responsible for seven percent of the payroll. (See Exhibit 3.)

Although construction enjoys above average wages, wage gains over the past decade have been more difficult to achieve. The average construction wage, not adjusted for inflation, has made the slowest gains of all major industry categories. After adjusting for increases in the cost-of-living, even

these small gains evaporate. For example, in 1997 dollars, construction's average monthly wage in 1988 was $4,532 compared to $3,811 in 1997. (See Exhibit 4.) There is no clear answer to this weak wage performance–only speculation. Some possible reasons may include a decline in the number of overtime hours worked; the fact that union wages remained largely frozen between 1983 and 1991; and, in the view of some, extraordinarily high wages in the late 1970s and early 1980s. More recently, however, there has been an improvement in the wage picture. During the past two years, the average monthly wage for construction, adjusted for the cost-of-living, has reached a plateau. So it appears this long-term slide in real wages may have run its course and perhaps real gains are in the offing.

Seasonality remains strong

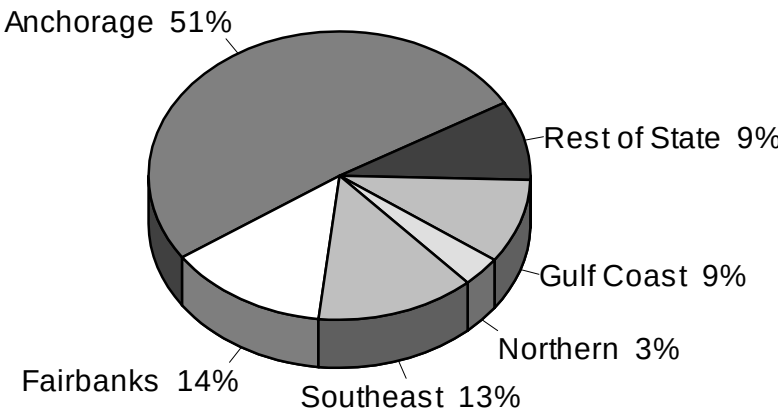
Although workers in this industry often enjoy higher hourly and monthly wages, their annual earnings may at times fall short of earnings of other workers whose monthly wages are lower. Construction remains one of the state's most seasonal industries–only fish processing and the visitor industry are more seasonal. (See Exhibit 5.) In 1996, 23,262 different individuals worked in the construction industry over the course of the year; monthly employment peaked at 16,200 and the average annual employment was 12,600.

Improved construction techniques could lead to the belief that construction jobs are becoming less seasonal than in the past; yet there is no evidence of this in the employment data of the past 20 years. Each year, the peak employment month is either August or September, with employment at nearly double the level of the low month–January. For example, in 1997, peak employment was 16,300 in August versus 9,400 in January. Hours worked and wages earned follow the same seasonal pattern. (See Exhibits 6 and 7.) This seasonality helps to partially explain the relatively high incidence of nonresidents in the industry. In 1996, 23.7% of all workers in the industry and 15.8% of the industry's

Largest Contractors 8
Alaska 1997

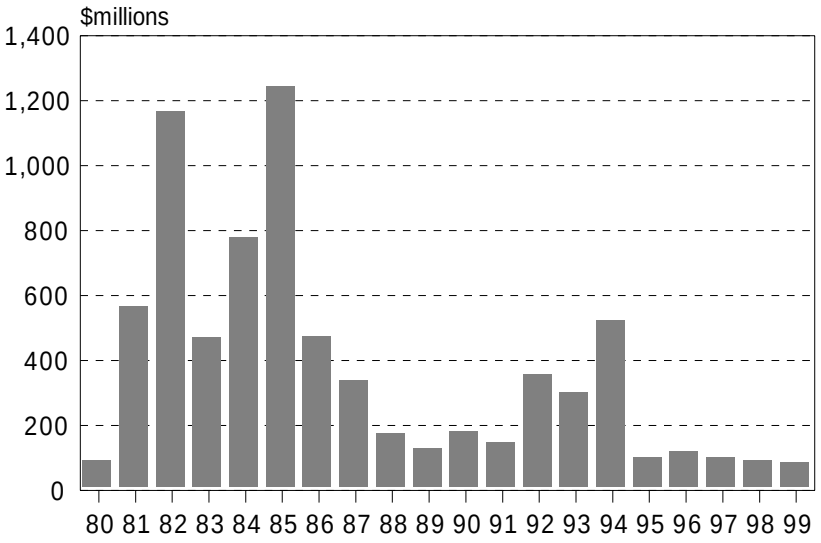
Rank	Firm	Average Employment
1	HC Price	529
2	Undelhoven Oilfield System Services	157
3	Wilder Construction	153
4	UIC Construction	149
5	South Coast	148
6	Osborne Construction	147
7	SKW/Eskimos	129
8	Alaska Interstate Construction	115
9	Alcan Electric and Engineering	109
10	Davis Contractors and Engineers	107
11	Quality Asphalt Paving	84
12	Gaston and Associates	82
13	Strand Hunt Construction	81
14	City Electric	78
15	Kiewit Pacific	75
16	New Horizons Telecom	71
17	Wolverine Supply	68
18	Arctic Camps and Equipment	66
19	Aurora Electric	66
20	Alaska Mechanical	65
21	Houston Contracting	64
22	Superior Plumbing and Heating	63
23	Central Environmental	57
24	Summit Paving and Construction	56
25	Red Samm Construction	54

Jobs by Location of Firm Hq 9
Actual jobs may be dispersed



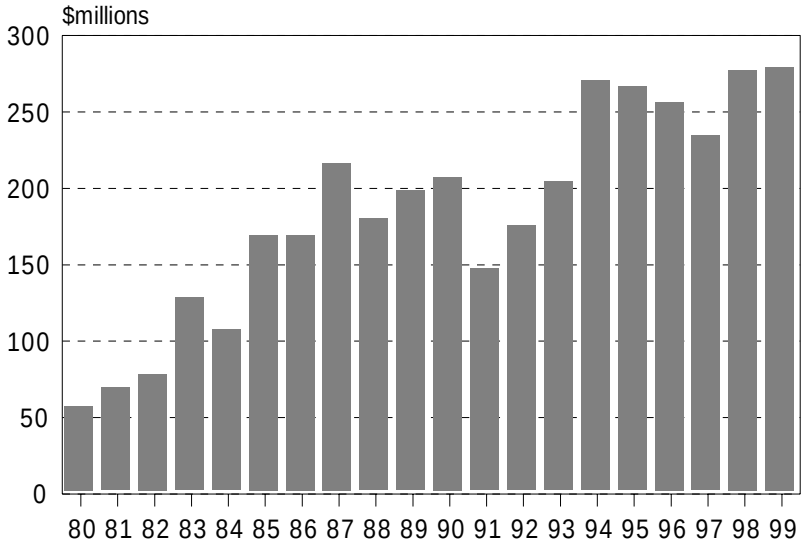
Source: Alaska Department of Labor, Research and Analysis Section

10 State Capital Budget
Less for construction in the 1990s



Source: Alaska Legislative Affairs Agency

11 Army Corps of Engineers
Spends around $250 million per year in Alaska in late 1990s



Source: U.S. Army Corps of Engineers

payroll went to nonresidents, rates which are somewhat higher than for the state overall. If the industry were less seasonal, the incidence of nonresidents would probably also be lower.

Anchorage headquarters the industry but jobs exist around the state

Even though most of the state's largest contractors list Anchorage as their headquarters address, thereby suggesting that half the construction industry jobs exist in Anchorage, these data must be treated carefully. (See Exhibits 8 and 9.) Because most construction contracts are usually short-term and the work occurs around the state, trying to accurately account for where the actual employment is taking place or where the workers live is a nearly impossible task. In theory, these employment data are reported by the location of the job. But because of the nomadic nature of many contractors' work, most of these contractors simply report one location for employment purposes, usually wherever their headquarters is located. It would not be uncommon for an Anchorage or Fairbanks contractor who has a project outside the headquarters community to have employees who are residents from a variety of geographic areas in the state or, in some cases, country.

Federal share of construction climbs

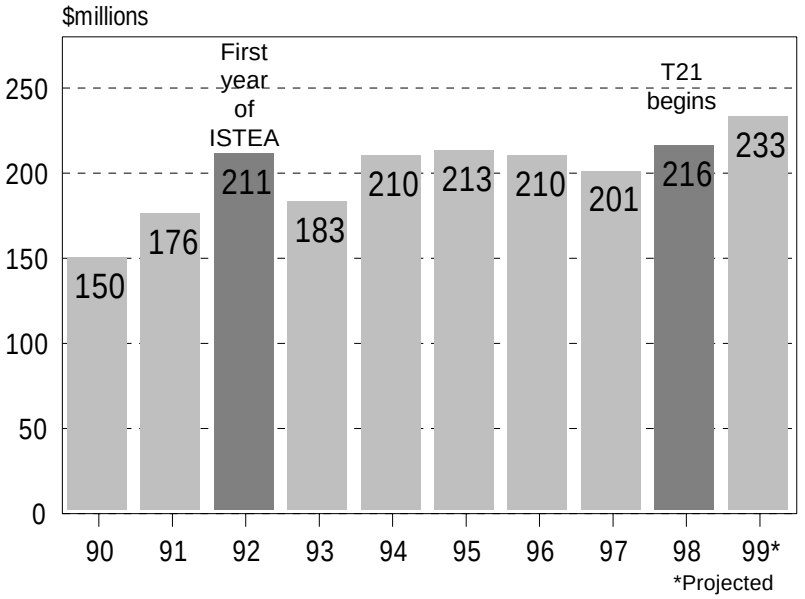
While no comprehensive data exist that provide a breakdown of public sector versus private sector construction funding, some trends are evident. One of these trends is that the state's role in the construction industry diminished over the years as oil revenues fell. (See Exhibit 10.) During the past five years, the state's capital budget has rarely broken the $100 million mark, in contrast to the 1980s when it twice exceeded a billion dollars (in unadjusted dollars). These state figures don't tell the entire story, however, particularly in recent years. Although only $85 million in general funds went to capital construction for the current fiscal year, the state is using other methods such as

leveraging state dollars for matching federal capital. For example, the Alaska Housing Finance Corporation will be issuing $199 million in bonds this year for a variety of capital projects around the state. Other state agencies, such as the Alaska Industrial Development and Export Authority, are used to leverage money for large construction projects. In addition, the massive four-year, $205 million state airport construction project at the Anchorage International Airport is largely funded through user fee revenue bonds.

During the past decade, the federal government has provided Alaska with a steady source of growth in construction funding. Two sources of this increased funding have been the U.S. Army Corps of Engineers and federal highway funds. The Corps' growth is coming from an increase in both military- and civilian-related projects. (See Exhibit 11.) The growing importance of the Air Force in Alaska has translated into more investment on Eielson Air Force Base (AFB) in Fairbanks and Elmendorf AFB in Anchorage. One recent large project is the construction of the new $150 million hospital on Elmendorf. Over the past decade, the Corps has also spent $20-50 million per year for environmental cleanup of former defense sites. On the civilian side, more funds are going to boat harbor construction. In 1992, federal highway funds got an initial boost with the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA), which for five to six years meant federal highway funds climbed to a new level of funding. (See Exhibit 12.) Then, in 1998, Congress passed a new federal highway-funding bill called the Transportation Equity Act for the 21st Century (otherwise known as the T21 bill) that will again ratchet up the funding for highway construction for the next six years.

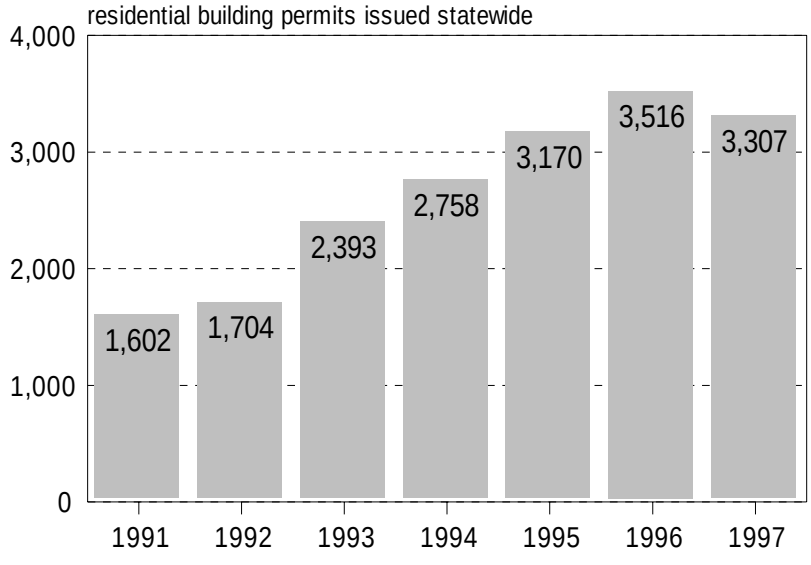
Trends in private sector construction are more elusive because of the fractured nature of the industry. By most accounts this part of the industry has also enjoyed a steady upswing. Residential activity has enjoyed strong growth around the state. (See Exhibit 13.) The commercial side of

Federal Highway Funds 12
Continue to grow



Source: Alaska Department of Transportation and Public Facilities

Residential Construction 13
A growth industry in the 1990s



Source: Alaska Department of Labor; Fairbanks North Star Borough; Municipality of Anchorage

construction got its first big boost in the early 1990s with the explosion of new national retailers moving into the market and expanding their operations around the state. Then, after a short lull, another boom in new hotel construction followed, which is not yet over. During this lull there was a flurry of mining-related construction anchored by the Healy Clean Coal Project and the Fort Knox Mine. The most recent new blood that is helping sustain the growth in this industry is North Slope-related oil patch work. This year and 1999 will go down as the busiest years on the North Slope since the giant $1.5 billion gas handling facility (GHX-2) of the early 1990s. Construction-wise, this work is actually probably larger than GHX-2. This is not only because of the simultaneous development of a myriad of new fields on the North Slope, but also because many of the modules, new camps and other work, which historically were often built elsewhere in the world, are being constructed in Fairbanks, Kenai, Anchorage and the North Slope.

Construction will end the century on a stable course

Construction's evolution into a remarkably stable industry (an adjective not usually associated with it) may have been inevitable. There are contractors and workers who pine for the more rough-and-tumble decades of the past, while many others welcome this more predictable, stable environment. There are no events on the near horizon that would lead one to believe this general trend toward stability will not continue into the next century. In the longer run, the future could be different. Alaska remains a young frontier state, with a small population and workforce. So it is certainly conceivable that construction could again exert a huge influence on the Alaskan economy. It would, however, take something on the magnitude of oil development in the Alaska National Wildlife Refuge or the construction of a gas pipeline to begin to mirror past boom years. Whatever happens, construction is one industry that nearly always has something interesting under way.